

ABSTRACT OF THE DISCLOSURE

The invention equalizes the lengths of optical paths required in optical communication among optical paths constructed by plural optical fibers. Optical fibers parallel to each other at non-equal intervals are set to ADD, OUT, IN and DROP, and are used for add-drop. An ADD-OUT optical path of an optical path length $A+2E$ from the optical fiber to the optical fiber through a fixing mirror and a movable mirror, and an IN-DROP optical path of an optical path length $C+2E$ from the optical fiber to the optical fiber through a movable mirror and a fixing mirror are formed. When the movable mirrors are escaped, an ADD-DROP optical path of an optical path length $A+B+C+2E$ from the optical fiber to the optical fiber through the fixing mirrors, and an IN-OUT optical path of an optical path length $B+2D+2E$ from the optical fiber to the optical fiber through fixing mirrors are formed. Three optical paths except for ADD-DROP are set to the same length by setting $A=C=B+2D$.